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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Vincent Cedric Colnot

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EXAMINER

GYORFI, THOMAS A

ART UNIT

PAPER NUMBER

2135

MAIL DATE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,650	Applicant(s) COLNOT, VINCENT CEDRIC	
	Examiner Thomas Gyorfi	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-22 is/are rejected.
- 7) ☒ Claim(s) 17-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-13 and 15-22 remain for examination. The correspondence filed 3/31/08 allegedly amended claims 1 and 16; however, a review of the prosecution history shows that those claims remain verbatim to the iteration of said claims from the amendment of 8/9/07. Thus, for purposes of examination, the status of claims 1 and 16 will be regarded as "Previously presented".

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/08 has been entered.

Response to Arguments

3. Applicant's arguments filed 3/31/08 have been fully considered but they are not persuasive. Applicant appears to have ignored Examiner's arguments made in the previous Office Action regarding the overbroad nature of the claim language in trying to argue for a narrow interpretation of the claims; however, in doing so, Applicant has appealed to features disclosed in the specification that are not present in the claims. For example, Applicant argues on page 7 of the amendment of 3/31/08:

Applicant argues that applicant's invention, as claimed reads a modulated signal, not sound waves as taught in Atsmon. Applicant's invention provides a modulated signal produced from the smart card directly to the microphone input of the sound card on the PC. Applicant's card reader does not operate as a microphone and sound waves are not generated by applicant's smart card. Applicant does not believe a sound wave produced by the card of Atsmon reads on the modulated signal as claimed.

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[...]

Applicant argues that the main difference applicant's invention and that of Atsmon is that applicant's invention does not need to generate "sound", or "acoustic waves" to accomplish the invention. Applicant teaches the use of the modulation from the chip to communicate directly with the soundcard, bypassing the usual acoustic mode.

Examiner respectfully reminds Applicant of the fact that "sound waves" and "modulated signals" **are not mutually exclusive concepts** (see the Office Action of 10/30/07, page 2, paragraph #2). Moreover, in at least one embodiment of the Atsmon invention, the sound waves transmitted by the smart card are encoded via DTMF - Dual Tone Modulation Frequency – i.e. they are modulated [acoustic] signals. See col. 11, lines 1-3; and col. 31, lines 10-15; cf. the previously cited "DTMF encoding" reference from the Office Action of 10/30/07. A modulated acoustic signal is by definition a type of modulated signal, just as recited in the claims. Applicant's argument that the modulated signal(s) of the preferred embodiment of the instant invention may not be acoustic in nature, is not found in the claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Additionally, Applicant argues on page 6 of the amendment of 3/31/08:

Applicant points out that there is absolutely no disclosure in the art of Atsmon teaching a card reader in connection with the microphone input of a PC. The Examiner relies upon col. 3, lines 52-63 of Atsmon to read on said limitation, which recites: "However, in another embodiment, special readers can be used to provide various functionality-from reading the contents of the card (for those systems without a sound device) to adding bidirectional support for an otherwise one-way card to recharging the battery(ies) in the card. So, if the computer system is not equipped with a sound system, a special reader is provided to allow the electronic card to communicate with the computer system. As another example, the special reader can be an electronic device with a microphone to allow an otherwise transmit-only one-way electronic card to have two-way capability." (col. 3, lines 52-63)

It is observed that the embodiment of Atsmon cited above is an alternative to the preferred embodiment wherein a standard microphone is connected to the microphone jack on a conventional sound card (col. 3, lines 45-52; col. 31, lines 30-60; Figure 11). Furthermore, the very purpose of the microphone in the Atsmon invention is precisely to read the signals being emitted from the smart card

and relay them to the computer for subsequent processing by components other than the microphone itself (Ibid, and col. 32, lines 35-50). Accordingly, the microphone as employed by Atsmon is a "card reader" under the broadest reasonable interpretation of the term – and certainly as Atsmon would have understood the term – and furthermore not only would it be inherent to conventional sound cards such as the explicitly disclosed "Sound Blaster" card that a microphone would be plugged into the microphone input in order to be able to use it (see the Creative Sound Blaster manual reference from 12/01/06, page 1-7), but also that the microphone has no processing means of its own to manipulate the received signal as discussed *supra*. Accordingly, the microphone used by Atsmon reads on all the limitations of the claims vis-à-vis the card reader.

Claim Objections

4. Claims 17-22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The objected claims are directed to a method, although the parent claim 1 is directed to an apparatus. Examiner respectfully suggests that all these objections may be overcome by amending claim 17 to be dependent on method claim 16 rather than apparatus claim 1

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 1-13, 15, and 17-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites "a card reader plugged into a microphone input of the PC sound card" and "a smart card transmitting an identification sequence to the microphone input of the PC in the form of a modulated signal"; however, it is unclear if the former card reader is involved in the latter transmission step, or if the smart card may somehow bypass the card reader and transmit directly to the microphone input (such as with a cable that connects directly to two audio ports – see the "How to record music..." reference from the Office Action of 5/15/07). Examiner respectfully suggests that Applicant may wish to amend the latter limitation of claim 1 so as to resemble the equivalent limitation of claim 16 wherein the transmission occurs via the card reader, or alternatively point out where in the specification that the smart card may bypass the card reader. Claims 2-13, 15, and 17-22 are rejected by virtue of their dependency on claim 1.

Claim Rejections - 35 USC § 102

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-11, 13, and 15-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Atsmon et al. (U.S. Patent 6,607,136).

Regarding claim 1:

Atsmon discloses an apparatus for securing online transactions on the Internet comprising: a card reader plugged into the microphone input of the PC sound card (col. 3, lines 45-63; col. 31, lines

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30-60; Figure 11); a smart card transmitting an identification sequence to the microphone input of the PC in the form of a modulated signal (element 10 of Figure 1; col. 31, lines 29-55; modulated signals at col. 11, lines 1-3 and col. 31, lines 10-15); and a PC applet demodulating the identification sequence, and characterized by the absence of processing means within the card reader (col. 32, lines 25-50 and 64-67).

Regarding claim 16:

Atsmon discloses a method for securing online transactions on the Internet comprising: providing a smart card for transmitting an identification sequence from the smart card to a PC in the form of a modulated signal (element 10 of Figure 1; col. 31, lines 29-55; col. 11, lines 1-3); plugging a card reader into the microphone input of the PC sound card the card reader devoid of processing means (the microphone: col. 3, lines 45-63; element 112 of Figure 11); transmitting the modulated signal directly from the smart card to the microphone input via the card reader (Ibid; col. 8, lines 3-8; col. 32, lines 38-42); and demodulating the identification sequence by a PC applet (col. 32, lines 25-50 and 64-67; see also paragraph #3 above).

Regarding claim 2 and 17:

Atsmon further discloses wherein the identification sequence comprises at least a unique card number (col. 16, lines 30-31) and a random number valid only once (col. 81, lines 45-50).

Regarding claim 3 and 18:

Atsmon further discloses wherein the random number is a session key which is not transmitted to the authentication server (col. 16, lines 33-35).

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Regarding claim 4 and 19:

Atsmon further discloses wherein the session key is a function of the previous one emitted by the card (col. 16, lines 60-65).

Regarding claim 5 and 20:

Atsmon further discloses wherein the session key is used by the PC applet to generate a message authentication code of the password entered by the user; said first MAC is transmitted to the authentication server along with the card number (col. 52, lines 30-45; see also col. 32, lines 64-67).

Regarding claim 6 and 21:

Atsmon further discloses wherein the server generates a second MAC of the password stored in the server authentication database, using a session key deduced from the previous session key also stored in the database (col. 60, lines 20-38; see also col. 16, lines 60-67).

Regarding claim 7 and 22:

Atsmon further discloses wherein the authentication is valid only if said first and second MAC are identical; and wherein the authentication server replaces Ki-1 with Ki and Ki cannot be reused (col. 78, lines 11-38).

Regarding claim 8:

Atsmon further discloses wherein the smart card is powered by the voltage provided by the microphone input of the PC sound card (col. 3, lines 52-57).

Regarding claim 9:

Atsmon further discloses wherein the smart card transmits the modulated signal when the switch of the card reader is pressed by the user (col. 28, lines 6-18).

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Regarding claim 10:

Atsmon further discloses wherein at least one embodiment of the invention conforms to the ISO standards for smart cards (col. 25, lines 10-15). Consequently, it is inherent to such embodiments that the smart card transmits the modulated signal to the microphone input through ISO contact C6 (see also the ISO7816 reference, page 3).

Regarding claim 11:

Atsmon further discloses wherein at least one embodiment of the invention conforms to the ISO standards for smart cards (col. 25, lines 10-15). Consequently, it is inherent to such embodiments that the smart card transmits the modulated signal when the ISO contact C2 is pulled down (see also the ISO7816 reference, page 3).

Regarding claim 13:

Atsmon further discloses wherein the card reader further comprises a battery cell powering the card (col. 3, lines 52-57; see also element 251 of Figure 26). It is inherent to the SoundBlaster cards used in the preferred embodiment of Atsmon (col. 31, lines 30-35) that they possess line inputs which exist as alternatives to plug other miscellaneous devices into (for illustration, see the previously cited Creative Sound Blaster manual, page 1-7). Also see MPEP 2163.07(a).

Regarding claim 15:

Atsmon further discloses wherein the card reader is further integrated into the PC unit (col. 3, lines 48-52).

Claim Rejections - 35 USC § 103

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atsmon, and further in view of ISO 7816.

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Regarding claim 12:

Atsmon further discloses wherein at least one embodiment of the invention conforms to the ISO standards for smart cards (col. 25, lines 10-15). The ISO discloses only one set of power contacts for one power source (C1 and C5, ISO 7816, page 3, section 2.2.3). However, Atsmon has an embodiment where the smart card is in contact with multiple power sources exist: both a battery on the card (element 251 of Figure 26) and a power supply in the reader (col. 3, lines 52-57); furthermore, contacts C4 and C8 were left reserved for future use. (see ISO 7816, page 4, section 2.3.1). It would have been obvious to use those contacts to allow both power sources to be connected to the card simultaneously, not only because all the claimed elements were known in the prior art, and one skilled in the art could have combined the elements as claimed with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention; but also that one would be motivated to do so in order to allow the card to recharge the battery (Atsmon, col. 3, lines 52-57).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Gyorfi whose telephone number is (571)272-3849. The examiner can normally be reached on 8:30am - 5:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAG

5/16/08

/KIMYEN VU/

Supervisory Patent Examiner, Art Unit 2135